



COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF KENTUCKY • COLLEGE OF AGRICULTURE

TREES, SHRUBS, AND VINES
THAT ATTRACT WILDLIFE



AGRICULTURE • HOME ECONOMICS • 4-H • DEVELOPMENT



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VIRGINIA CREEPER
Parthenocissus quinquefolia

NOTES

Small white flowers in early summer; small grapelike berries in fall; crimson fall foliage; be careful where planted because it can escape and become invasive. Birds love the berries.



GREENBRIER ▶
Smilax spp.

- S. BONA-NOX (BRISTLY)
- S. GLAUCA (SAWBRIER, CATBRIER)
- S. ROTIFOLIA (GREENBRIER)
- S. TAMNOIDES (HISPID)

NOTES

Thorny stems can be hazardous; difficult to find at nurseries; difficult to transplant because of a long taproot.



GRAPE
Vitis spp.

- V. AESTIVALIS (SUMMER)
- V. CINEREA VAR. CINEREA (GRAYBARK, SWEET WINTER) VAR. BAILEYANA (BAILEY'S)
- V. LABRUSCA (FOX)
- V. PALMATA (CATBIRD)
- V. RIPARIA (RIVERBANK)
- V. ROTIFOLIA (MUSCADINE)
- V. VULPINA (FROST)

NOTES

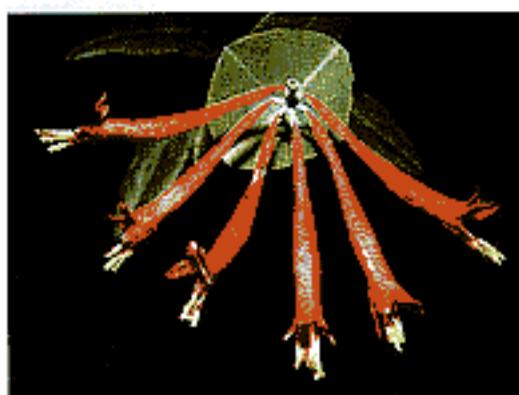
Heart-shaped leaves; small flowers in long clusters; purple berries; common in many habitats; can be harmful to trees because the vine can grow up a tree and shade the tree with its broad leaves. Many cultivated species and varieties are available at nurseries.

**OLD MAN'S BEARD, VIRGIN'S BOWER***Clematis virginica***NOTES**

Butterflies and hummingbirds will use as a nectar source.

TRUMPET HONEYSUCKLE ▼*Lonicera sempervirens***NOTES**

Excellent nectar source for hummingbirds.

**PASSIONFLOWER***Passiflora* spp.

P. INCARNATA
P. LUTEA

NOTES

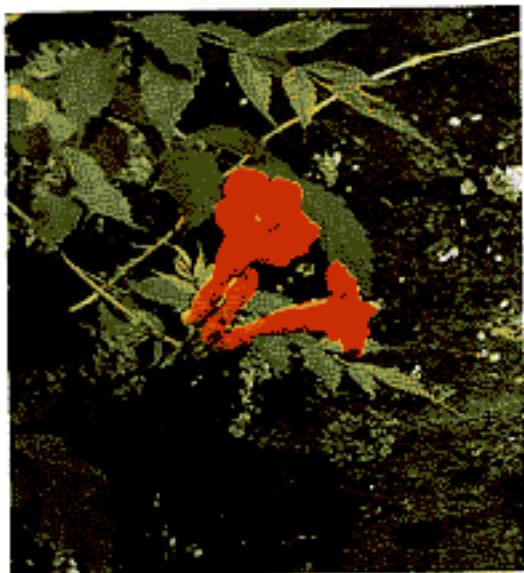
Larval food for Gulf fritillary butterfly.



CROSS VINE ▶
Bignonia capreolata

NOTES

Excellent source of nectar for hummingbirds.



TRUMPET VINE
Campsis radicans (trumpet creeper)

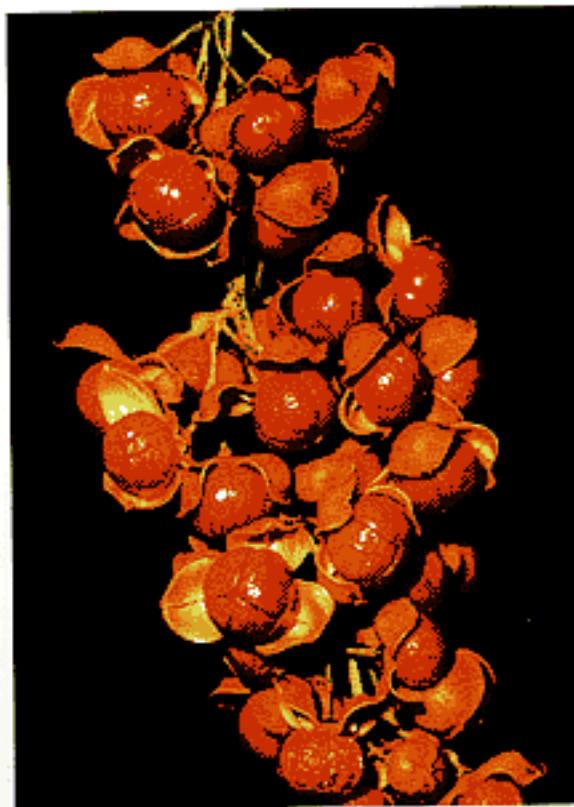
NOTES

Vigorous, woody, deciduous climbing vine; orange and scarlet flowers; good ornamental; can escape and become invasive. Excellent source of nectar for hummingbirds.

BITTERSWEET
Celastrus scandens

NOTES

Commonly used for fall decorations. Berries hang on into late winter when birds will eat them.





RASPBERRIES, BLACKBERRIES, DEWBERRIES *Rubus* spp.

- R. ALLEGHENIENSIS* (BLACKBERRY)
- R. FLAGELLARIS* (DEWBERRY)
- R. FRISPIDUS* (SWAMP DEWBERRY)
- R. OCCIDENTALIS* (BLACK RASPBERRY)
- R. ODORATUS* (FLOWERING RASPBERRY)
- R. PENNSylvANICUS*

NOTES

Some references list as many as 90 species of *Rubus* in Kentucky; the species are difficult for most people to tell apart. The species listed above are the most common. Most of the species are thorny shrubs growing from 2 to 9 feet tall. Fruits occur in a cluster of fleshy drupelets; roots are perennial; orange-red fall foliage; fruits are edible by humans except for flowering raspberry. If you want some to eat, keep the birds away from this plant!



BLUEBERRY *Vaccinium* spp.

- V. ARBOREUM* (FARKLEBERRY)
- V. PALIDUM* (LOWBUSH)
- V. SIAMULATUM*
- V. CORYMBOSUM* (HIGHBUSH)
- V. STAMINACEUM* (DEERBERRY, SQUAWBUSH)

NOTES

Bell-shaped, white flowers; blue-purple fruits in summer; must have an acidic soil; grows best in full sun to partial shade. Excellent fall color. Larval food for brown elfin, Henry's elfin, striped hairstreak, and spring azure butterflies.

**ROSE***Rosa* spp.

- R. CAROLINA* (CAROLINA)
- R. PALUSTRIS* (SWAMP)
- R. SETIGERA* (CLIMBING)

NOTES

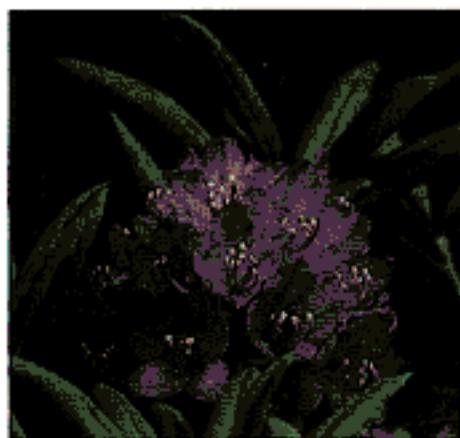
Upright, trailing, or climbing shrubs; thorny stems; red berries eaten by birds.

RHODODENDRON AND AZALEAS*Rhododendron* spp.

- R. ARBORESCENS* (SMOOTH AZALEA)
- R. CAELODULACEUM* (FLAME AZALEA)
- R. CATAWBIENSE* (PURPLE RHODODENDRON, MOUNTAIN ROSEBAY)
- R. CUMBERLANDENSE* (RED AZALEA)
- R. MAXIMUM* (GREAT RHODODENDRON)
- R. PERICLYMENOIDES* (PINXTER FLOWER, PINK AZALEA)
- R. PRINOPHYLLUM* (ROSE AZALEA)

NOTES

Rhododendrons are evergreen; azaleas are deciduous shrubs; brilliantly colored flowers from late spring to early summer; oblong fruits; frequently understory shrubs; need acidic soil and soil amendments if grown outside the Cumberland Plateau region. Larval food for the striped hairstreak and gray comma butterflies. Excellent source of nectar for hummingbirds and butterflies. Honey produced is generally regarded as poisonous to humans.

**GOOSEBERRIES***Ribes* spp.

- R. CYNDOSRATTI* (PRICKLY)
- R. MISSOURIENSE* (MISSOURI)

NOTES

Larval food for the gray comma butterfly. Berries are edible by humans.





BUTTONBUSH A
Cephaelanthus occidentalis (buttonbush)

NOTES

One of top ten butterfly nectar plants.

FILBERT (AMERICAN HAZELNUT)
Corylus americana

NOTES

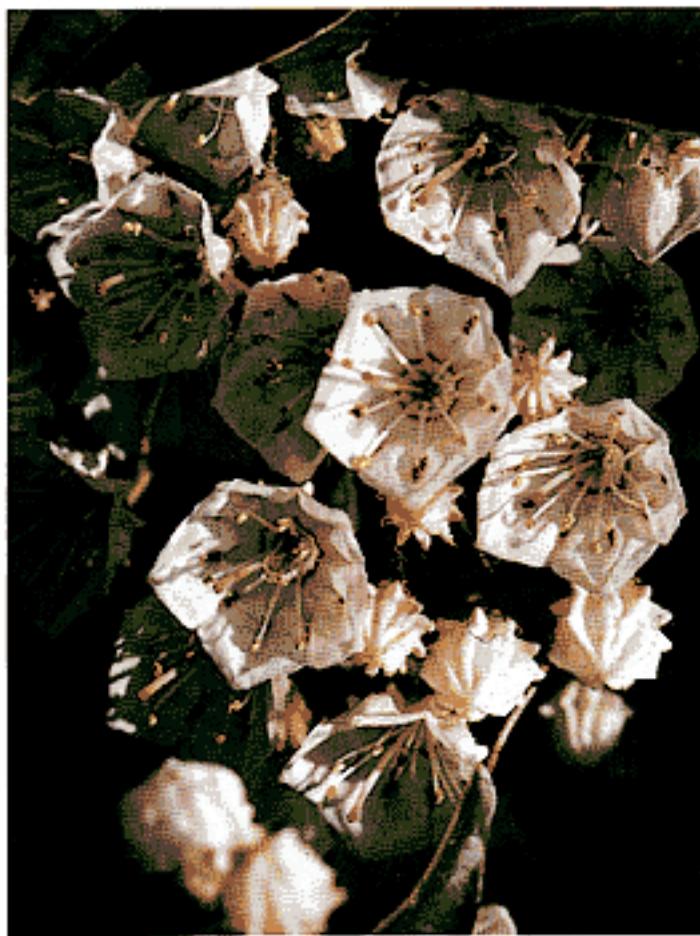
Easily propagated as seedlings; there are some named varieties, but these are generally not as hardy, and often their flowers are killed during the winter. Nuts are relished by humans and wild mammals alike.

HUCKLEBERRY
Gaylussacia spp.

G. BACCATA
G. BRACHYCERA (BOX)

NOTES

Semi-evergreen shrub; flowers in late winter to early spring; small black fruits ripen unevenly and last for two to three months; fruits are similar to blueberries and can be eaten by humans, although they contain many seeds. Larval food for the brown elfin and Henry's elfin butterflies.



MOUNTAIN LAUREL
Kalmia latifolia

NOTES

Requires acid soil and looks best when grown in combination with *Rhododendron* species; leaves are poisonous to livestock and humans. A great nectar source for butterflies and hummingbirds.

ELDERBERRY*Sambucus* spp.*S. CANADENSIS* (COMMON)*S. PUBENS* (RED-BERRIED ELDER)**NOTES**

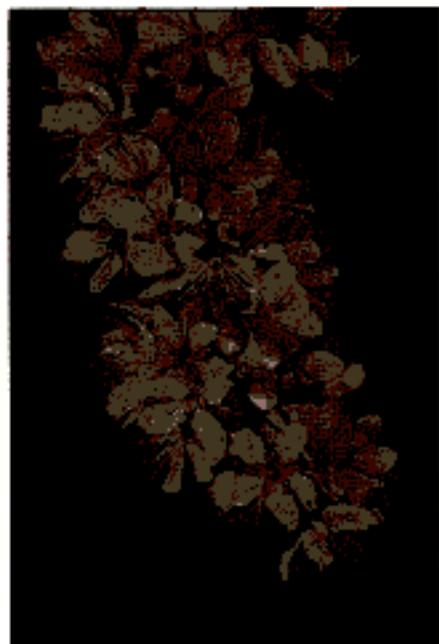
Large shrub or small tree; white flowers in early spring to frost; purple-black berries on red stems; grows best in moist soil; berries can be used in making jellies and wine. Birds love these early fall berries.

**BLACK HAW***Viburnum* spp.*V. ACERIFOLIUM* (MAPLE LEAF)*V. DENTATUM* VAR. *DENTATUM* (ARROW WOOD)VAR. *LUCIDUM**V. MOLLIFOLIUM* (KENTUCKY VIBURNUM)*V. NUDUM* VAR. *NUDUM* (POSSUM HAW)VAR. *CASSINOIDES* (WITHE ROD)*V. PRUNIFOLIUM* (BLACK HAW)*V. RAFINESQUEANUM* (ARROW WOOD)*V. RUFIDULUM* (SOUTHERN BLACK HAW)**NOTES**

Large shrub or small tree; dark green, glossy foliage; creamy white flowers in late spring; clusters of dark blue fruit with white sheen in fall; grows in full sunlight to part shade. Larval food for spring azure butterfly. Birds absolutely relish these berries!

CHOKEBERRY*Aronia* spp.*A. ARbutifolia* (RED)*A. MELANOCarpa* (BLACK)**NOTES**

Deciduous shrub; shiny red berries that last into the winter. Larval food for the striped hairstreak butterfly. Berries are generally not preferred by birds, but they will eat them in late winter when other food is not available.

**PLUMS***Prunus* spp.

- P. AMERICANA* (WILD PLUM)
P. ANGUSTIFOLIA (ICKASAW PLUM)
P. MUNSONIANA (WILD GOOSE PLUM)

NOTES

White blossoms in spring; small red fruits in late summer; yellow-orange fall foliage; found frequently in open areas, old fields, fencerows, and pastures. Among our most important wildlife food plants; fruit can be used for wine or jelly. Birds go wild over these berries!

BUCKTHORN*Rhamnus* spp.

- R. CAROLINIANA* (CAROLINA)
R. LANCEOLATA (LANCE LEAF)

NOTES

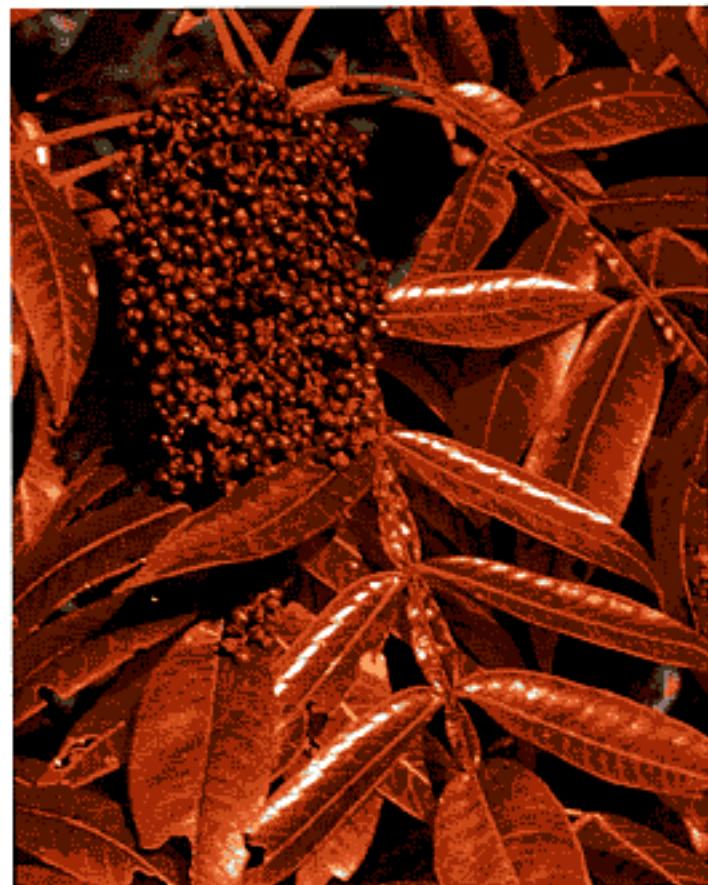
Large shrub or small tree; lustrous, dark green foliage; clusters of red berries in fall eventually turn black; yellow fall foliage; grows best in full sun to part shade. Can become invasive.

SUMAC ▶*Rhus* spp.

- R. AROMATICA* (FRAGRANT)
R. COPALLINUM (WINGED, SHINING)
R. GLABRA (SMOOTH)
R. HIRTA (STAGHORN)

NOTES

Large shrub or small tree; wine-red panicles of fruit in late summer to fall; scarlet fall foliage. Can be an invasive or aggressive plant in landscapes. Larval food for the red-banded hairstreak butterfly. The berries of sumac are poisonous to humans at any stage and are generally not eaten by birds until late in the winter when other food sources have perished.



CRAB APPLE, APPLE*Malus spp.*

M. ANGUSTIFOLIA
M. CORONARIA (WILD)
M. IOENSIS

NOTES

Large shrub or small tree; often branches bear small spines; early spring pinkish-white flowers; yellow fall foliage; cedar waxwings are known to prefer Red Jade cultivar. Cultivars suitable for Kentucky that resist diseases and insects include David, Harvest Gold, Jewelberry, Red Jade, Red Jewel, and Prairiefire. In general, crab apples are not good bird food but do provide excellent food for raccoons, opossums, squirrels, and deer. Larval food for the gray hairstreak, spring azure, red-spotted purple, viceroy, tiger swallowtail, and striped hairstreak butterflies.

**MULBERRY***Morus rubra* (red)**NOTES**

Heart-shaped or variably lobed leaves; red to dark purple fruits in late spring; clear yellow fall foliage; grows best in full sun; the fruits are edible by humans and wildlife love them; they can become invasive in some cases. Sexes are separate, and male and female trees must be planted to obtain fruit. This species has been known to attract the most spectacular flocking of birds of any fruiting tree. Larval food for the mourning cloak butterfly.

**AMERICAN HOPHORNBEAM***Ostrya virginiana***NOTES**

Small- to medium-sized tree; catkin flowers producing small nutlet fruits in late summer. Larval food for the mourning cloak and red-spotted purple butterflies.

BURNING BUSH*Euonymus* spp.

- E. AMERICANA* (STRAWBERRY BUSH, HEARTS-A-BURSTING-WITH-LOVE)
- E. ATROPURPUREA* (WAHOO, BURNING BUSH)
- E. OBOVATA* (RUNNING STRAWBERRY BUSH, RUNNING EUONYMUS)

NOTES

Tall treelike shrub; branches have two to four corky wings making them appear square; small yellow flowers in spring; purple-capped pods open in fall displaying three orange-red seeds; brilliant red fall foliage; grows best in full sunlight. Birds love the berries.

**HOLLY***Ilex* spp.

- I. DECIDUA* (SWAMP HOLLY, POSSUM HAW)
- I. MONTANA* (MOUNTAIN WINTERBERRY)
- I. VERTICILLATA* (WINTERBERRY)

NOTES

Glossy green leaves with spiny margins; white flowers followed by bright red fruits persisting until late winter. Cultivars of possum haw suitable for Kentucky include Council Fire, Pocahontas, and Warren's Red; cultivars of winterberry suitable for Kentucky include Afterglow, Sunset, and Winterred. Larval food for Henry's elfin butterfly.

SPICEBUSH*Lindera benzoin***NOTES**

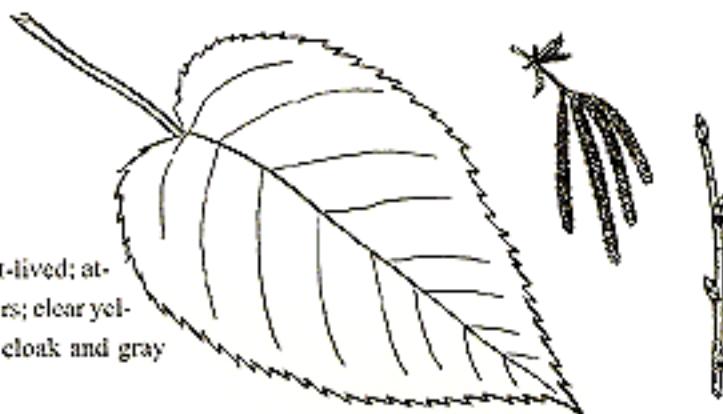
Deciduous shrub; spicy aroma from crushed leaves; red berries in late summer; clear yellow fall foliage; grows best in rich moist soil. Larval food for spicebush and tiger swallowtail butterflies. Birds will eat the red berries.

BIRCH*Betula* spp.

- B. LENTA (SWEET)
- B. LUTEA (YELLOW)
- B. NIGRA (RIVER)

NOTES

Small- to medium-sized tree; relatively short-lived; attractive, flaky bark; hard, brown catkin flowers; clear yellow fall foliage. Larval food for mourning cloak and gray comma butterflies.

**DOGWOOD***Cornus* spp.

- C. ALTERNIFOLIA (ALTERNATE LEAF)
- C. AMOMUM SSP. AMOMUM (SILKY)
- SSP. OBliqua (PALE)
- C. DRUMMONDI (ROUGH LEAF)
- C. FLORIDA (FLOWERING)
- C. FEMININA (STIFF)
- C. RACEMOSA (GRAY)

NOTES

Small herbaceous plants and shrubs, as well as small trees; large, showy white flowers in midspring; bright red berries in fall; crimson autumn foliage; common understory tree; slow growing; varieties of flowering dogwood recommended for Kentucky include Cherokee Chief, Cherokee Princess, Cloud Nine, First Lady, Pendula, Purple Glory, Rainbow, Rubra, Summertime, Sweetwater, and Welchii. Larval food for the spring azure butterfly. Birds love the berries!

**HAWTHORN***Crataegus* spp.

- C. CRUS-GALLI (COCKSPUR)
- C. MOLLIS (RED HAW)
- C. PHAENOPYRUM (WASHINGTONI)

NOTES

Species of hawthorns are numerous, complex, and difficult to separate; there are more than two dozen species in the state; small trees or shrubs; spines along branches; red fruit remain on tree until late winter; common on roadsides and old farmland. Larval food for the gray hairstreak butterfly. Birds love these berries!

ALDER*Alnus serrulata* (common)**NOTES**

Large shrub; flowers are hard, brown catkins; common along streams and damp areas; grows best in partial shade.


**SERVICEBERRY, JUNEBERRY, SARVIS,
SHADBUSH, SHADBLOW**
Amelanchier spp.

A. ALOREA (DOWNY)
A. LAEVIS (SMOOTH)

NOTES

Small tree or large shrub; among the first woody plants to produce dainty white flowers in the spring; purple applelike fruits in June; gold to red-orange fall foliage; adapted to planting along ponds, rivers, and streams; will grow in full sun, partial shade, or full shade. The cultivar, Autumn Sunset, of downy serviceberry is recommended for Kentucky. Cultivars of smooth serviceberry suitable for Kentucky include Prince Charles and Cumulus. Probably the best summer fruit for birds; they absolutely love these berries!

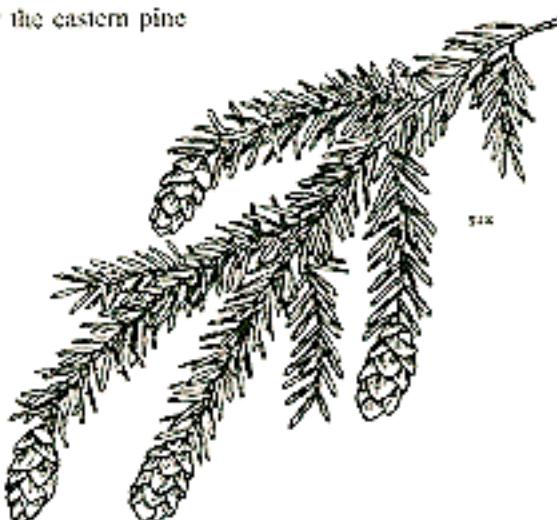
PAWPAW*Asimina triloba***NOTES**

Fruits are edible by humans. Larval food for zebra swallowtail butterfly.



**PINE ▲***Pinus spp.**P. ECHINATA* (YELLOW, SHORTLEAF)*P. RIGIDA* (PITCH)*P. STROBIFLORUS* (WHITE)*P. VIRGINIANA* (VIRGINIA, SCRUB)**NOTES**

Larval food for the eastern pine elfin butterfly.

**EASTERN HEMLOCK***Tsuga canadensis***NOTES**

Medium to large evergreen trees; small cones hang from end of branchlets; mature cones release winged seeds; common in cool, moist slopes in Eastern Kentucky; very shade tolerant; varieties recommended for Kentucky include Pendula or Weeping Hemlock and Sargentii.

**HOLLY***Ilex opaca* (American)**NOTES**

Not a coniferous tree; glossy green leaves with spiny margins; white flowers followed by bright red fruits persisting until late winter. Cultivars suitable for Kentucky include Cecile, Chief Paduke, Indian Maiden, Julie Kochler, Judy Evans, Klein #1, Lady Alice, Maryland Dwarf, Richards, and Virginia Giant. Sexes are separate, and both male and female trees must be planted to obtain fruit. Larval food for Henry's elfin butterfly. The berries provide a late winter food source for birds when other berries may not be available.

**JUNIPER, RED CEDAR***Juniperus virginiana* (eastern)**NOTES**

Blue fleshy cones form the berries in autumn; shade tolerant; pioneer plant found commonly in poor soil sites; cultivars suitable for Kentucky include Burkii, Canaertii, and Hillspire. Larval food for the olive hairstreak butterfly. Birds relish the blue berries.

SPRUCE*Picea* spp.*P. ABIES* (NORWAY)*P. GLAUCA* (BLACK HILLS; CULTIVAR DENSATA)*P. PUNGENS* (COLORADO; CULTIVARS GLAUCA, HOOPSII, THOMPSONII, MOERHEIMII, KOSTERI, AND FAI ALBERT)**NOTES**

Not native to Kentucky. Spruce trees can be used in the landscape, but they do not reproduce; primarily used for wildlife cover.



LOCUST ▶*Robinia* spp.

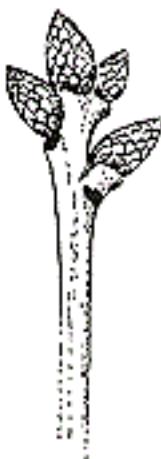
R. HISPIDA VAR. *ROSEA* (ROSE-ACACIA, BRISTLY)
R. PSEUDOACACIA (BLACK)

NOTES

Bristly locust is a thorny, medium-sized shrub with purple flowers. Larval food for the Zarucco duskywing, common sulphur, silver-spotted skipper, and dreamy duskywing butterflies. Extension horticulturalists do not recommend planting black locust because it produces a great number of suckers from its roots.

**SASSAFRAS***Sassafras albidum***NOTES**

Leaves can be without lobes or have two or three lobes; early summer blue-black fruits; fall foliage brilliant red, yellow, and orange; common in open fields, fencerows, and wood edges; tree parts used in tea and candy; difficult to transplant because of a long taproot; female tree bears fruit. Larval food for the spicebush and palamedes swallowtail butterflies.

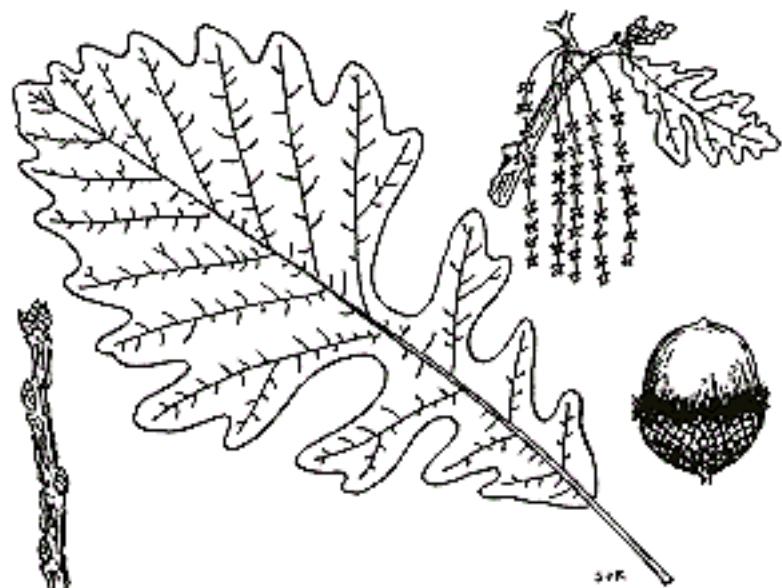
**OAK***Quercus spp.*

- Q. ALBA* (WHITE)
- Q. BICOLOR* (SWAMP WHITE)
- Q. FALCATA* (SOUTHERN RED)
- Q. IMBRICARIA* (SHINGLE)
- Q. LYRATA* (OVERCUP)
- Q. MACROCARPA* (BUR)
- Q. MARilandica* (BLACKJACK)
- Q. MICHAUXII* (SWAMP CHESTNUT, BASKET, COW)
- Q. PRINUS* (CHESTNUT, MOUNTAIN CHESTNUT, ROCK CHESTNUT)
- Q. MUhlenbergii* (CHINQUAPIN, YELLOW)
- Q. NIGRA* (WATER)
- Q. PAGODA*
- Q. PALUSTRIS* (PIN)
- Q. PHELLOS* (WILLOW)
- Q. RUBRA* (NORTHERN RED)
- Q. SHUMARDII* (SHUMARD)
- Q. STELLATA* (POST)

NOTES

Lobed leaves; fruit as acorns; found in wide range of habitats; wide variety of fall foliage from red to yellow to purple; the white, willow, and pin oaks are relatively fast-growing oaks; white oak is difficult to transplant because of a long taproot. Pin oak is not recommended because it is over-planted, has scale problems, and has drooping branches that must be removed every year. Larval food for Juvenal's duskywing, Horace's duskywing, Edward's hairstreak, white M hairstreak, banded

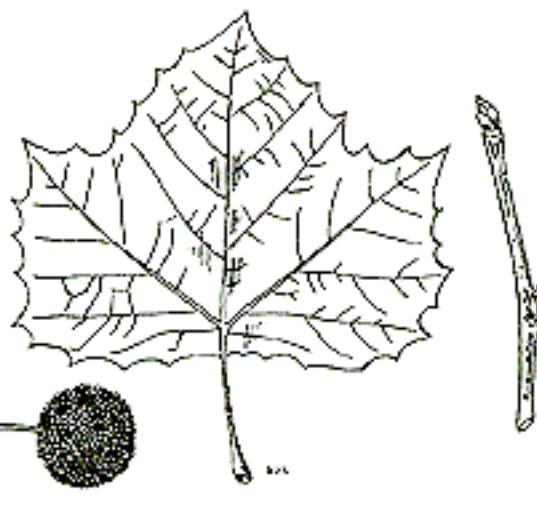
hairstreak, sleepy duskywing, and northern hairstreak butterflies. The red oak group usually is a consistent producer of acorns. White oaks do not produce acorns as consistently; however, wildlife prefer white oak acorns. Excellent source of energy for squirrels, deer, turkeys, raccoons, and numerous other wildlife species.



3.5"

SYCAMORE*Platanus occidentalis***NOTES**

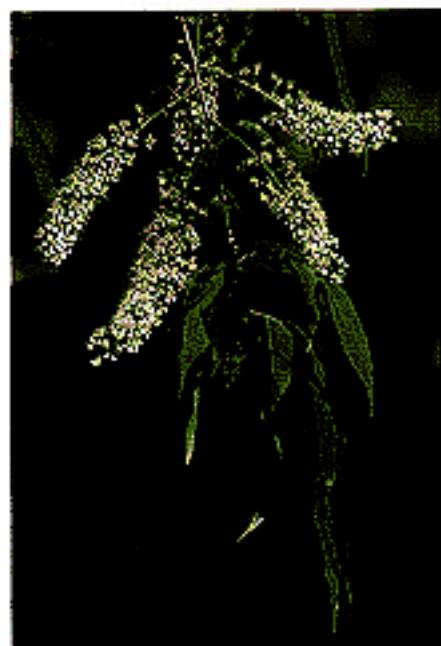
Bark in pattern of browns and whites; shallow-lobed leaves; hanging fruits; brown fall foliage. Large trees often become hollow and are used as nesting sites for wildlife. Extension horticulturalists do not recommend this species because it is a trashy tree.

**COTTONWOOD***Populus spp.*

P. deltoides (EASTERN COTTONWOOD)
P. grandidentata (BIG-TOOTHED ASPEN)
P. heterophylla (SWAMP COTTONWOOD)

NOTES

Fast-growing; toothed leaves; seed capsule matures in late spring; each seed attached to a tuft of white hair; brilliant yellow fall foliage. Extension horticulturalists do not recommend eastern cottonwood because of surface roots and cottony seeds. Larval food for mourning cloak, red-spotted purple, viceroy, and tiger swallowtail butterflies.

**CHERRY***Prunus spp.*

P. serotina (BLACK CHERRY)
P. virginiana (CHOKER CHERRY)

NOTES

White blossoms in spring; small red fruits in late summer; yellow-orange fall foliage; found frequently in open areas, old fields, fencerows, and pastures. Among our most important wildlife food plants; fruit can be used for wine or jelly. Extension horticulturalists do not recommend black cherry because it reseeds, stains walks, and is considered a nuisance in landscape beds and fencerows. Larval food for tiger swallowtail, coral hairstreak, striped hairstreak, red-spotted purple, and spring azure butterflies. Birds love the seeds from these plants!

YELLOW POPLAR

Liriodendron tulipifera
(tulip poplar, tulip tree)

NOTES

Our state heritage tree; lyre-shaped leaves; undistinctive yellow fall foliage; distinctive greenish white flower marked with orange in spring. Larval food for tiger swallowtail and spicebush swallowtail butterflies.

**MAGNOLIA**

Magnolia spp.

M. ACUMINATA (CUCUMBER TREE)
M. FRASERI (FRASER'S)
M. MACROPHYLLA (BIG LEAF)
M. TRIPETALA (UMBRELLA)

NOTES

Large white flowers in late spring to early summer; cones open in late summer to release bright red seeds; mostly understory trees. Exceptionally large showy blooms in May.

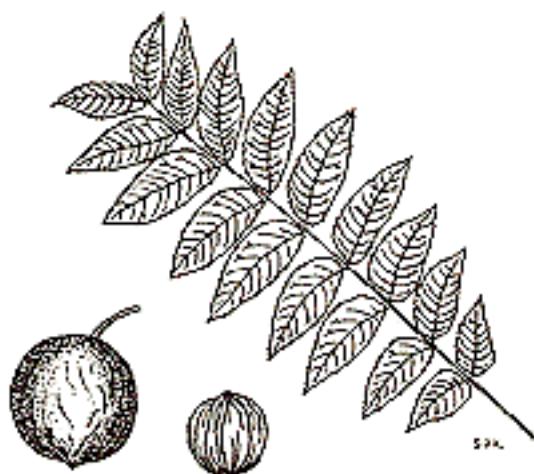
**GUM**

Nyssa spp.

N. AQUATICA (TUPELO GUM, WATER TUPELO)
N. SYLVATICA (SOUR GUM, BLACK GUM, BLACK TUPELO)

NOTES

Deeply furrowed blocky bark; dark blue fruits usually in clusters from midsummer persisting to early winter; deep red and purple fall foliage is one of first to turn color. A long taproot makes it difficult to transplant.

**WALNUTS***Juglans spp.**J. CINEREA* (BUTTERNUT, WHITE WALNUT)*J. NIGRA* (BLACK WALNUT)**NOTES**

Butternuts are not recommended except in the mountains at high elevations because they are susceptible to bacterial canker that results in a short-lived tree, usually fewer than 20 years; self-fruitful, although they perform better when cross-pollinated. Cultivars recommended for Kentucky include Clermont, Emma K., Farrington, Myers, Sparrow, and Stabler. Extension horticulturists do not recommend planting black walnut because it is the last to produce leaves in the spring, first to drop leaves in the fall, the nuts are messy, and there is juglone toxicity to other plants. Larval food for banded hairstreak butterfly. Squirrels love these nuts!

**SWEET GUM***Liquidambar styraciflua***NOTES**

Star-shaped leaves turning red to purple in autumn; female flower forms the hard, spiny gum balls that encase the seeds. Cultivars suitable for Kentucky include Festival and Rotundiloba.

PERSIMMON*Diospyros virginiana* (common)**NOTES**

Orange fruits ripening in fall can be eaten by humans; red to yellow fall foliage; common along the edges of woodlands, old fields, and fencerows. The sexes are separate, and both male and female trees must be present to obtain fruit. Deer, turkeys, raccoons, and squirrels love these large fruits.

**BEECH***Fagus grandifolia* (American)**NOTES**

Retains brown fall foliage through the winter; three-angled nuts; shade tolerant. Squirrels love this nut. Larval food for early hairstreak butterfly.

**ASH***Fraxinus* spp.

- F. AMERICANA* (WHITE)
- F. PENNSYLVANICA* (GREEN)
- F. QUADRANGULATA* (BLUD)
- F. PROFUNDA* (PUMPKIN)

NOTES

Medium-sized tree; opposite leaf arrangement; winged seeds; brilliant yellow fall foliage for green ash and red to maroon color for white ash; grows best in full sunlight. Cultivars of **green ash** suitable for Kentucky include Bergeson, Emerald, Newport, Patmor, Summit, and Urbanite. Cultivars of **white ash** suitable for Kentucky include Autumn Purple, Autumn Applause, Champaign County, Rosehill, and Skyline. Extension horticulturalists do not recommend green ash because of storm damage problems. Larval food for tiger swallowtail, hickory hair-streak, and mourning cloak butterflies.

**HICKORIES***Carya* spp.

- C. AQUATICA* (WATER)
- C. GLABRA* (PIGNUT)
- C. ILLINOENSIS* (PECAN)
- C. LACINIOSA* (BIG SHAGBARK, BIG SHELLBARK, KINGNUT)
- C. OVALIS* (SWEET PIGNUT, SMALL-FRUITED)
- C. OVATA* (SHAGBARK, SHELLBARK)
- C. TOMENTOSA* (MOCKERNUT, WHITE)

NOTES

Shagbark, pecan, big shagbark, pale, and sweet pignut have edible nuts; subject to disease; slow growing; nuts can be self-fruitful in some cases, but allowing for cross pollination is better. Varieties of shagbark hickory recommended for Kentucky include Yoder #1, Bridgewater, Silvas, Wurth, Grainger, Wilcox, Porter, and Wilmoth. Varieties of shellbark recommended for Kentucky include Fayette, Bradley, Chetopa, Keystone, Lindauer, Neilson, Stauffer, Stephens, and Totten. Varieties of recommended for Kentucky include Chickasaw, Fisher, Greenriver, Hodge, Kentucky, Major, Mohawk, Posey, and Shoshone. Larval food for hickory hairstreak and banded hairstreak butterflies. Squirrels love these nuts!

CATALPA ▶*Catalpa speciosa* (northern catalpa, cigar tree)**NOTES**

Larval food for tiger swallowtail butterfly; flowers are used as a nectar source by hummingbirds.

**HACKBERRY***Celtis* spp.

- C. LAEVIGATA* (SUGARBERRY, SMOOTH HACKBERRY)
- C. OCCIDENTALIS* (COMMON)
- C. TENNUIFOLIA* (DWARF)

NOTES

Gray to brown warty bark; small red fruits when ripe; unattractive light yellow fall foliage; common along fencerows, roadsides, and old fields. Larval food for snout, question mark, mourning cloak, tawny emperor, and hackberry butterflies. Extension horticulturalists do not recommend planting common hackberry because it reseeds and has a witch's broom type of growth.

MAPLE*Acer*spp.

- A. *NIGRUM* (BLACK)
- A. *NEGUNDO* (BOX ELDER)
- A. *PENNSylvANICUM* (STRIPED)
- A. *RUBRUM* (RED)
- A. *SACCHARINUM* (SILVER, WATER)
- A. *SACCHARUM* (SUGAR)

NOTES

Opposite leaf arrangement; distinctive winged seeds called samaras; brilliant orange to red fall foliage in sugar, black, and red maples; grows best in full sun to partial shade. Cultivars of red maple suitable for Kentucky include Armstrong, Autumn Flame, Bowhall, Columnare, Edna Davis, Gerling, Karpick, Northwood, October Glory, Red Skin, and Red Sunset. Cultivars of sugar maple suitable for Kentucky include Bonfire, Caddo, Commemoration, Columnare, Green Mountain, Legacy, Steeple, and Sweet Shadow. Silver or water maple is not recommended because it has been overplanted in the landscape, reseeds, is weak-wooded, trashy, and self-destructs in ice and wind storms.

**BUCKEYES***Aesculus*spp.

- A. *DISCOLOR* (RED AND YELLOW)
- A. *GLABRA* (OHIO)
- A. *OCTANDRA* (YELLOW, SWEET)
- A. *PAVIA* (RED)

NOTES

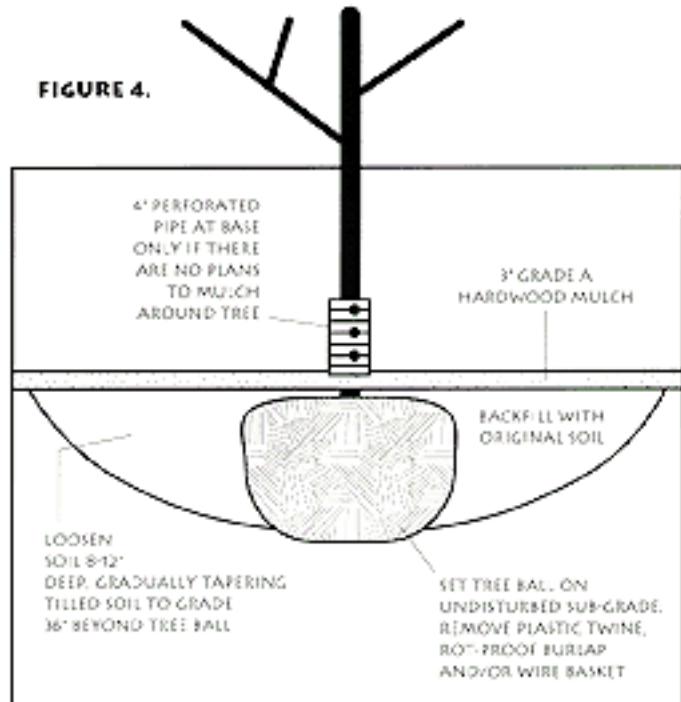
Flowers are used as a nectar source by hummingbirds. One of the first species to produce leaves in spring. No exceptional fall color.

The most ideal situation involves planting a recently dug balled-and-burlapped tree with a sufficiently sized root ball into noncompacted, well-drained soil with 50 percent solid material and 50 percent pore space. Before trees are purchased and planted, it is important to assess the planting site, make design and site modifications, choose plants that match the specific site, and use good transplanting techniques.

Note the following ideal planting techniques:

- The surface soils are better aerated when the surface diameter is increased and the sides of planting holes are tapered.
- The tree is placed at the depth grown in the nursery, and no deeper! Look for the root collar, and remove soil if necessary.
- A 2- to 3-inch layer of organic mulch replaces turf around the tree base, ideally to the drip line of the tree. Grass roots compete significantly with tree roots and impair tree growth. An 8-foot circle of mulch quadruples root development of newly planted trees.
- There is no "pimple" of excess mulch; 4 to 6 inches of mulch is never good; it rots the bark of the tree trunk.
- There is no excessive saucering.
- If mulch is not used and turf is grown up to the base of the tree, the trunk should be protected from a lawn mower, string trimmer, or tractor with perforated pipe at the tree's base. Check annually, and remove when the tree outgrows it.
- No stakes are used. Stakes are unnecessary in 99.9 percent of plantings.
- There is no tree wrap because tree wrap encourages fungi/bacteria to grow in the dark, humid environment under it.
- A 4-inch perforated pipe can be installed and connected to a drainage area only if the clay is extremely heavy or the soil waterlogged.

FIGURE 4.



Once the trees are established they will need to be pruned. For information on pruning, ask your Cooperative Extension Agent for publication HO-45, *Pruning Landscape Trees*. For more information on growing nut trees, ask for publication ID-77, *Nut Tree Growing in Kentucky*.

In addition to the species listed in this report, there are other native trees that help protect genetic diversity or have showy blooms or interesting foliage. Many of these species may not be particularly attractive to wildlife, but they definitely add interest to the urban landscape. These species include our state tree, the Kentucky coffeetree (*Gymnocladus dioica*), as well as leatherwood (*Direa palustris*), wild hydrangea (*Hydrangea arborescens*), redbud (*Cercis canadensis*), bladdernut (*Staphylea trifolia*), sourwood (*Oxydendrum arboreum*), fringe tree (*Chionanthus virginicus*), American snowbell (*Styrax americana*), Carolina silverbell (*Halesia carolina*), witch hazel (*Hamamelis virginiana*), New Jersey tea (*Ceanothus americanus*), wisteria (*Wisteria macrostachya*), and yellowwood (*Cladrastis lutea*).

FIGURE 2.
CLUSTERING OF VIBURNUMS.

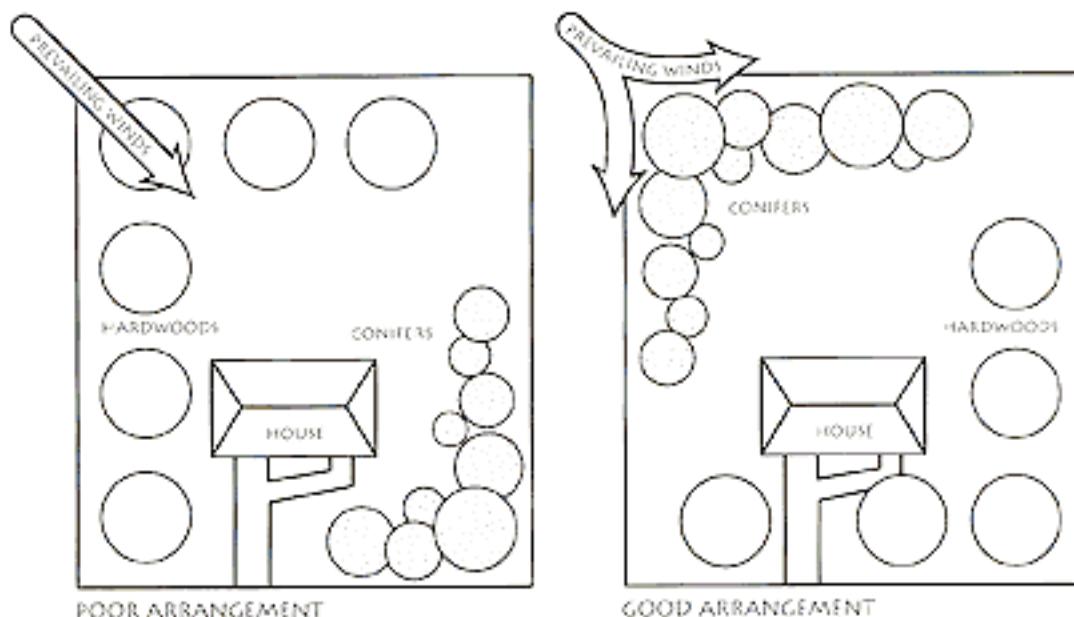
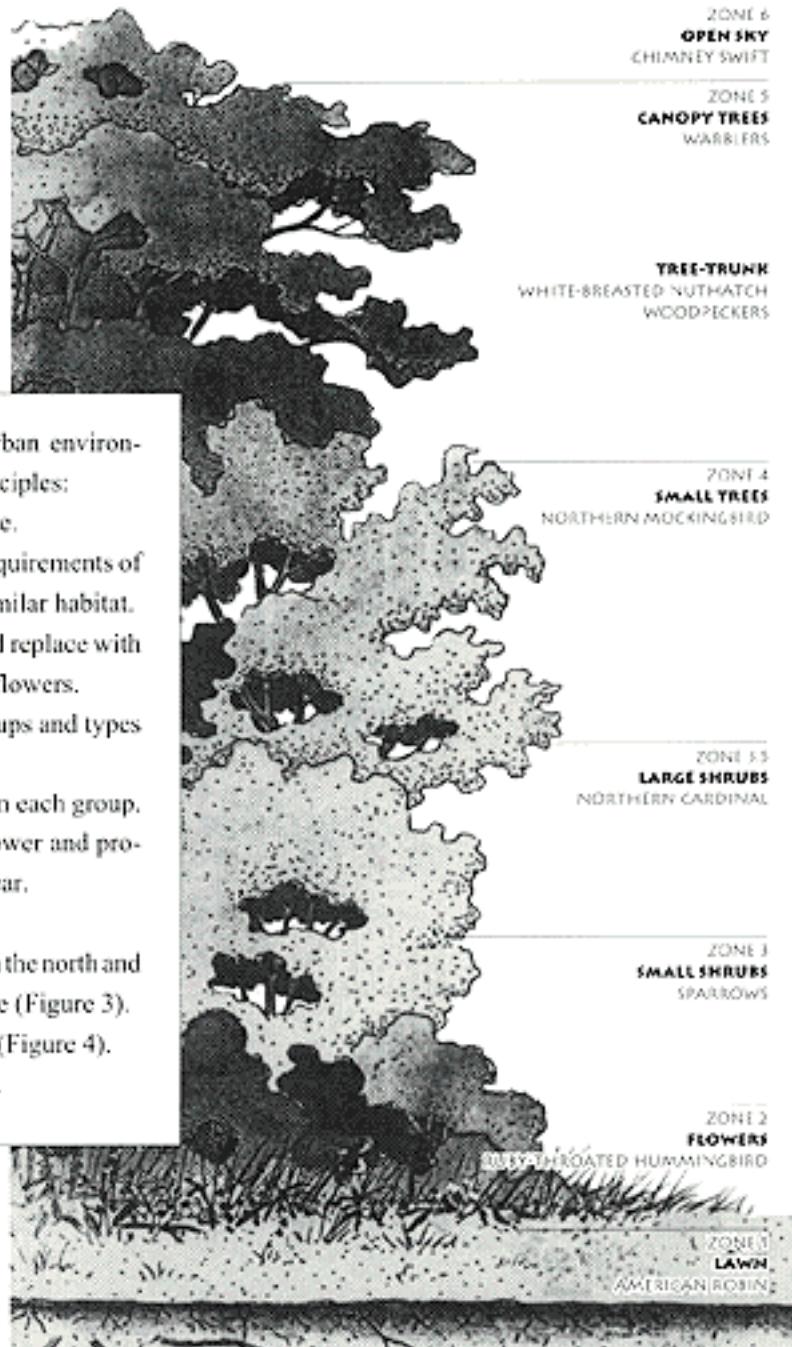


FIGURE 3.
THE GOOD ARRANGEMENT ON THE RIGHT IS PREFERRED FOR BACKYARD PLANTING.

This publication lists woody plants that can be used to attract wildlife into urban environments. Many of the species listed may not be available at a local nursery, so you must be persistent in your efforts to locate them at native plant nurseries. You might have better luck if you contact native plant nurseries that stock some of the more unusual and harder-to-find materials.



When designing landscapes for urban environments keep in mind the following principles:

- Use native plants whenever possible.
- Consider the ecological growing requirements of the plant so it can be placed in a similar habitat.
- Reduce the amount of lawn area and replace with woody plants and a variety of wildflowers.
- Use a variety of different plant groups and types (Figure 1).
- Use a variety of plant species within each group.
- Use a variety of plants that will flower and produce fruit at various times of the year.
- Plant in clusters (Figure 2).
- Plant conifers or dense tall shrubs on the north and northwest locations if at all possible (Figure 3).
- Follow proper planting techniques (Figure 4).
- Maintain your plants after planting.

FIGURE 1.
PLANT VARIETIES PROVIDE FOR DIVERSITY OF FEEDING NICHES FOR DIFFERENT BIRD SPECIES.